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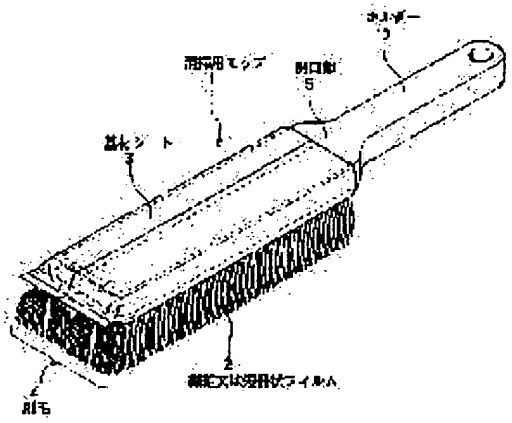
(54) CLEANING MOP

(57)Abstract:
PROBLEM TO BE SOLVED: To solve problems of a cleaning mop having a brush which is difficult to use and of a relatively high cost.
SOLUTION: A brush 4 is formed of a number of heat-fusible fibers or heat- fusible rectangular films 2, and the fibers or heat-fusible rectangular films 2 are heat-fused to a base sheet 3 to provide a cleaning mop 1, which can be easily manufactured at low cost. By changing rigidity of the fibers or rectangular films 2 to compose the brush 4, cleaning effect can be further improved.



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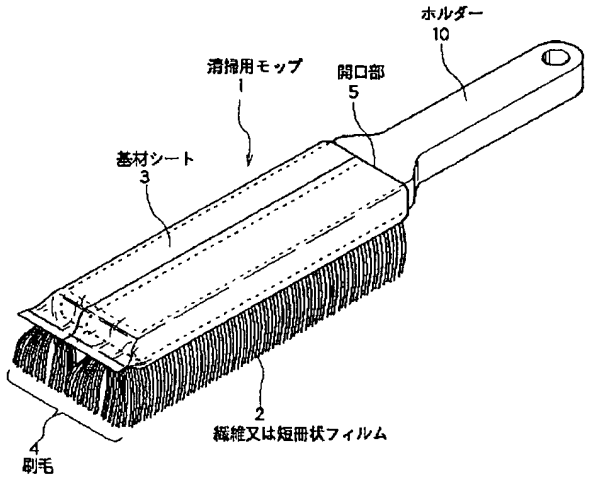
(54)【発明の名称】　清掃用モップ

(57)【要約】

【課題】　刷毛をもった清掃用モップは、使いづらくまた比較的高価なものであった。

【解決手段】　多数の熱融着可能な繊維または熱融着可能な短冊状フィルム２が密集して刷毛４が形成され、前記繊維または熱融着可能な短冊状フィルム４が基材シート３に熱融着されている本発明の清掃用モップ１は、簡便に且つ安価に製造することができる。また、刷毛４を構成する繊維若しくは短冊状フィルム２の剛性を変えることで、清掃効果がさらに高いものとすることができる。

図１



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【特許請求の範囲】

【請求項１】　多数の熱融着可能な繊維若しくは熱融着可能な短冊状フィルムが密集して刷毛が形成され、前記繊維若しくは短冊状フィルムが基材シートに熱融着されていることを特徴とする清掃用モップ。

【請求項２】　前記繊維若しくは短冊状フィルムが層状にまとめられ、前記繊維若しくは短冊状フィルムの層が二つ折りにされ、その折り目の部分が前記基材シートに熱融着されている請求項１記載の清掃用モップ。

【請求項３】　刷毛の外層から内層にかけて繊維または短冊状のフィルムの太さが異なっている請求項１または２記載の清掃用モップ。

【請求項４】　前記刷毛の外層の繊維若しくは短冊状フィルムが、内層の繊維若しくは短冊状フィルムよりも細い請求項３記載の清掃用モップ。

【請求項５】　刷毛の外層から内層にかけて繊維または短冊状のフィルムの剛性が異なっている請求項１または２記載の清掃用モップ。

【請求項６】　前記刷毛の外層の繊維若しくは短冊状フィルムが、内層の繊維若しくは短冊状フィルムよりも剛性が低い請求項５記載の清掃用モップ。

【請求項７】　基材シートが袋状に形成されて、ホルダーに着脱可能とされている請求項１、２、３、４、５又は６記載の清掃用モップ。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】本発明は、埃を払うために使用される清掃用モップに関する。特に簡単で且つ安価に製造できる、使い捨てに適した清掃用モップに関する。

【０００２】

【従来の技術及び発明が解決しようとする課題】従来、清掃時に用いる物品として種々のものが使用されている。室内で家具と家具との隙間や家具や調度品の凹凸部の埃を払うために使用される清掃用モップとして、一般的に木綿などの糸を撚ったモップパイルが布製の基布に多数本縫い付けられたものが保持具に留められて使用されている。しかし、モップパイルは木綿などによって形成されているため、比較的重量が重く、モップが汚れたときに新しいものを保持具に付け替えるには大変手間がかかる。また、使い捨て製品とするには高価すぎる。

【０００３】一方、清掃用モップ等の清掃用具に取り付けられて使用される、不織布を用いた使い捨て製品は、使用が簡便であり、広く市場に出回っている。これらの清掃用具は不織布の表面が拭き取り面となっており、その拭き取り面は平面である。例えば、特開平９－１５４７９１号公報には、不織布を貼り合わせて、内側にホルダーを挿入する為の空間が設けられている清掃布が開示されている。この清掃布は汚れたら簡単に新しいものをホルダーに付け替えることができる。しかし、清掃布に挿入されるホルダーの形で拭き取り面の形状が固定されるため、凹凸部や湾曲部をもった場所を清掃するのは難しい。

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【０００４】本発明の目的は、凹凸部や湾曲部を払拭することができる清掃用物品として、簡便に且つ安価に製造することができる清掃用モップを提供することにある。

【０００５】

【課題を解決するための手段】本発明の前記目的及び利点は、多数の熱融着可能な繊維若しくは熱融着可能な短冊状フィルムが密集して刷毛が形成され、前記繊維若しくは短冊状フィルムが基材シートに熱融着されていることを特徴とする清掃用モップによって達成される。

【０００６】本発明の清掃用モップには刷毛が形成されているので、取り付け面が平坦であるホルダー等に取り付けられたとしても、刷毛によって凹凸部や湾曲部を払拭することができる。また、この刷毛は、熱融着可能な繊維又は熱融着可能な短冊状フィルムを用いて、熱融着によって基材シートに接合することによって形成されているため、簡便に且つ安価に製造することができる。

【０００７】前記繊維若しくは短冊状フィルムが層状にまとめられ、前記繊維若しくは短冊状フィルムの層が二つ折りにされ、その折り目の部分が前記基材シートに熱融着することによって刷毛を形成すると、清掃用モップの製造が簡便であって好ましい。

【０００８】本発明の清掃用物品の刷毛は外層から内層にかけて繊維または短冊状のフィルムの太さが異なっている構成とすることが好ましい。繊維又は短冊状のフィルムの太さの違いによって違う種類のゴミを取ることができる。この場合、前記刷毛の外層の繊維若しくは短冊状フィルムが、内層の繊維若しくは短冊状フィルムよりも細いことが更に好ましい。

【０００９】また、太さが異なる繊維若しくは短冊状フィルムの代わりに、刷毛の外層から内層にかけて繊維または短冊状のフィルムの剛性が異なっている構成とすることも好ましい。繊維又は短冊状のフィルムの剛性の違いによって違う種類のゴミを取ることができる。この場合、前記刷毛の外層の繊維若しくは短冊状フィルムが、内層の繊維若しくは短冊状フィルムよりも剛性が低いことが更に好ましい。

【００１０】本発明の清掃用モップはホルダーからの着脱を簡便にするために、基材シートが袋状に形成されていることが好ましい。

【００１１】

【発明の実施の形態】以下、本発明について図面を参照して説明する。図１は本発明の清掃用モップをホルダーに装着したときの斜視図、図２（Ａ）は図１の清掃用モップの断面図、図３及び図４は刷毛の製造方法の説明図である。図１の清掃用モップ１は、基材シート３に繊維若しくは短冊状フィルム２が融着されて、刷毛４が形成されている。この刷毛４は、図２（Ａ）に示すように、

多数の繊維若しくは短冊状フィルム２が接合部７において基材シート３に接合されていることにより形成されている。本発明の清掃用モップ１を清掃に用いた場合、この刷毛４を利用して凹凸部や湾曲部を払拭することができる。

【００１２】この刷毛４の製造方法としては、図３（Ａ）に示すように、まず基材シート３の上に多数の繊維若しくは短冊状フィルム２を層状に重ねる。繊維若しくは短冊状フィルム２のそれぞれの繊維は、Ｘ方向へ延びている。そして図３（Ｂ）に示すように、繊維若しくは短冊状フィルム２のＸ方向における中心部分で、Ｘ方向と直交するＹ方向へ向かって、熱融着によって基材シート３に接合される。または、図４に示すように、多数の繊維若しくは短冊状フィルム２を層状に重ねたものを二つ折りにして熱融着によって接合し刷毛４を形成してから、その刷毛４の接合部７の部分を基材シート３に熱融着によって接合させることもできる。あるいは繊維若しくは短冊状フィルム２の層を二つ折りにして、その折り目の部分を基材シート３に直接熱融着することによって接合部７を形成してもよい。以上のようにすると基材シート３に、簡単に刷毛４を形成することができる。以上のようにして形成した本発明の清掃用モップ１は図２（Ａ）に示すように、刷毛４の長さがほぼそろったものとなる。

【００１３】ただし、本発明の清掃用モップ１を簡単に製造するには、繊維若しくは短冊状フィルム２の層が二つ折りにされ、その折り目の部分が基材シート３に熱融着されていることによって刷毛が形成されていればよい。例えば、図２（Ｂ）に示すように、繊維若しくは短冊状フィルム２のＸ方向における中心部分ではない部分で基材シート３に接合されていてもよい。その他、清掃用モップに多数の刷毛が形成される場合、それぞれの刷毛によって折り目の部分の位置が違うものであってもよい。

【００１４】本発明の清掃用モップ１は、図３（Ｂ）や図４に示す一列の刷毛を持った部分を単体で、若しくは複数合わせて形成することができる。例えば、図１および図２（Ａ）に示す清掃用モップ１は、一列の刷毛をもった基材シート３を二つ合わせ、基材シート３どうしを接合部３ａと３ｂとで互いに熱融着によって接合して形成することができる。また、二つの基材シート３で袋を形成できる。本発明の清掃用モップは、その使用する場所に合わせて刷毛の数及び量を調整することができる。

【００１５】本発明の清掃用モップの刷毛４は、図２（Ａ）に示すように、刷毛４の外層４ｂと、内層４ａとが違う太さの繊維若しくは短冊状フィルム２で形成されていることが好ましい。これは、図３（Ａ）に示すように、刷毛の外層４ｂを形成する繊維若しくは短冊状フィルム２ｂの層の上に、刷毛の内層４ａを形成する繊維若しくは短冊状フィルム２ａの層を重ねて熱融着することにより形成することができる。または、図４に示すように、外層４ｂを形成する繊維若しくは短冊状フィルム２ｂと、内層４ａを形成する繊維若しくは短冊状フィルム２ａとを重ねた後に、内層４ａが内側となるように二つ折りにして基材シート３に熱融着することによって形成することができる。さまざまな太さの繊維若しくは短冊状フィルムを組み合わせて使用することによって、清掃時においてそれぞれの繊維若しくは短冊状フィルム２が違う種類のごみを取り去ることになる。したがって、さらに清掃効果の高いものとすることができる。

【００１６】太さが異なる繊維若しくは短冊状フィルムを用いて刷毛を形成する場合、外層４ｂの繊維若しくは短冊状フィルム２ｂが、内層４ａの繊維又は短冊状フィルム２ａよりも細いことが好ましい。外層４ｂを細い繊維若しくは短冊状フィルムとすることにより、内層４ａによって掻き取られた埃やごみが、外層４ｂの細い繊維若しくは短冊状フィルムによって捕獲される。したがって、払った埃やごみが飛び散ることがない。

【００１７】また、本発明の清掃用モップでは、繊維の太さが違う繊維若しくは短冊状フィルムを用いる代わりに、剛性の違うものを用いることもできる。剛性の違いは、繊維や短冊状フィルムを構成する原料などによって変えることができる。剛性の違う繊維若しくは短冊状フィルムを用いる場合、外層４ｂを形成する繊維若しくは短冊状フィルム２ｂが、内層４ａを形成する繊維若しくは短冊状フィルム２ａよりも剛性が低いことが好ましい。剛性の高い内層４ａの繊維若しくは短冊状フィルム２ａで、硬いごみや埃を掻き取った後、掻き取られたごみや埃は外層４ｂの繊維若しくは短冊状フィルム２ｂによって捕獲される。したがって、払ったごみや埃が飛び散ることがない。

【００１８】また、刷毛４を構成する繊維若しくは短冊状フィルムの長さは６ｃｍ以上であることが好ましい。この場合、図３に示すようにして形成した刷毛４では、刷毛の毛の長さはほぼ３ｃｍ以上になる。刷毛４の長さが前記上限以上だと、清掃時に髪の毛等を絡みとる効果が上がるからである。また、繊維若しくは短冊状フィルムの毛の長さは１０ｃｍ以上、すなわち刷毛４の毛の長さはほぼ５ｃｍ以上になることが更に好ましい。刷毛４の毛の長さが長いと、窪みが深い凹凸部や湾曲部を清掃できる。

【００１９】また、本発明の清掃用モップ１では、図２（Ｃ）に示すように、外層４ｂを形成する繊維若しくは短冊状フィルム２ｂと、内層４aを形成する繊維若しくは短冊状フィルム２ａとの長さを違うものとすることができる。なお、本発明の清掃用モップの刷毛は二つの層で形成されることには限られず、３層又はそれ以上の層をもつ刷毛とすることができる。

【００２０】本発明の清掃用モップ１では、図１及び図２（Ａ）に示すように基材シート３が袋状に形成されて

いる。この清掃用モップ１は、例えば図１に示すように、基材シート３で形成された袋の開口部５にホルダー１０を挿入して清掃作業に用いることができる。基材シート３を袋状とすることにより、ホルダー１０への着脱を容易なものとすることができる。本発明の清掃用モップを装着するホルダー１０は、図１に示すような手で保持する形状に限られない。いわゆる床を拭くためのホルダーに前記袋を装着して使用しても、また、袋の部分を手で保持して使用するものであってもよい。または、基材シートが袋状に形成されなくても、手で保持して使用することが可能である。

【００２１】基材シート３は、例えばスパンボンド法によって形成された不織布、樹脂フィルム、合成繊維を含んだ布等、使用に耐えうる強度をもつものであればどのようなものも使用することができる。例えば、基材シート３の目付けは、１０～５０ｇ／m^2程度であれば必要な強度を得ることができる。但し、基材シート３は熱融着可能な繊維を含有することが、刷毛を接合する上で好ましい。またこの場合、基材シート３を袋状に形成する工程も熱融着によって行うことができる。繊維若しくは短冊状フィルム２は、熱融着可能なものである。繊維若しくは短冊状フィルム２と、基材シート３とを接合させるには熱処理（熱エンボスロール加工）や超音波溶着手段を用いて行うことができる。

【００２２】繊維は、例えば一般的にトウと呼ばれるものを使用することができる。繊維は、例えばポリエチレン、ポリプロピレン、ナイロン、ポリエステル、レーヨンなどから製造される。短冊状フィルムは、不織布やフィルム等のシート状のものを、幅寸法が極めて短い短冊状にし、その短冊状のシートを束にしたものを使用することができる。例えば、不織布に比較的狭い間隔で切れ目を入れたものを束にしたものである。この不織布やフィルムは従来公知のものを使用することができる。短冊状フィルムの形状は、ゴミ等を絡め捕ることができる適度な厚みと幅を持ったものが好ましい。

【００２３】刷毛４の外層４ｂと内層４ａで、剛性の違う繊維若しくは短冊状フィルムを使用する場合、例えば、刷毛の内層４ａを構成する繊維若しくは短冊状フィルム２ａはポリプロピレンとポリエチレンを用いたスプリットヤーン、外層４ｂを構成する繊維若しくは短冊状フィルム２ｂはポリエステルとポリエチレンを用いたトウを使用すると、外層４ｂと内層４ａとで剛性の違う清掃用モップ１とすることができる。埃等を吸着しやすくするために、本発明の清掃用モップ１には油剤を含有させることが好ましい。油剤は、パラフィン等の鉱物油、ポリオレフィン等の合成油、シリコーン油、界面活性剤などである。

【００２４】また以上のべた油剤の他、本発明における清掃用モップに、例えば消臭剤、保湿剤、抗菌剤等の物質を含有させることができる。本発明の清掃用モップ１は、刷毛４の部分にエアーや機械的力を与えて毛羽立たせることができる。本発明の清掃用モップ１を製品として市場に出す場合、使用前から刷毛４が毛羽立っていた方が使用時に埃などを払う能力を直ちに出すことができる。刷毛４を毛羽立たせない状態で清掃に使用しても、本発明の清掃用モップ１はその使用する経過で刷毛４は毛羽立ってくる。よって、刷毛４を前もって毛羽立たせなくてもよい。

【００２５】

【発明の効果】以上のように本発明の清掃用モップを用いれば、装着するホルダーの形にかかわらず、凹凸部や湾曲部の埃やごみを払拭することができる。特に、刷毛を形成する繊維若しくは短冊状フィルムの種類によっては、通常の木綿のパイルでできたモップよりも繊維若しくはフィルムが細いので、細かな隙間にも入り込んで埃やごみを払うことができる。

【００２６】さらに、刷毛の外層を剛性の低い繊維若しくは短冊状フィルム、刷毛の内層を剛性の高い繊維若しくは短冊状フィルムで形成することにより、払った埃やごみを飛び散らかさないで捕獲することができる清掃用モップとなる。

【００２７】また、本発明の清掃用モップは、熱融着可能な繊維若しくは短冊状フィルムを用いるため、熱融着によって簡便に且つ安価に製造することができる。

【図面の簡単な説明】

【図１】本発明の清掃用モップをホルダーに装着したときの斜視図

【図２】（Ａ）は図１の清掃用モップの断面図、（Ｂ）（Ｃ）は本発明の清掃用モップの他の例の断面図

【図３】本発明の清掃用モップの刷毛の製造方法の説明図

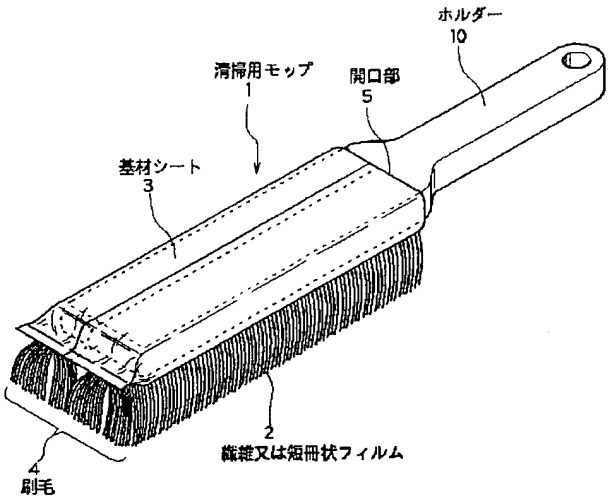
【図４】本発明の清掃用モップの刷毛の他の製造方法の説明図

【符号の説明】

１　清掃用モップ
２　繊維若しくは短冊状フィルム
３　基材シート
４　刷毛
４ａ　刷毛の内層
４ｂ　刷毛の外層
５　開口部
７　接合部
１０　ホルダー
Ｘ　繊維若しくは短冊状フィルムの延びる方向

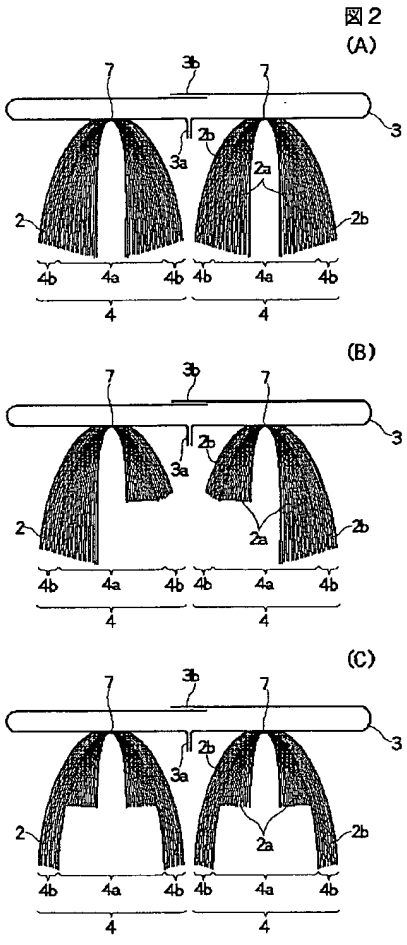
【図１】

図１



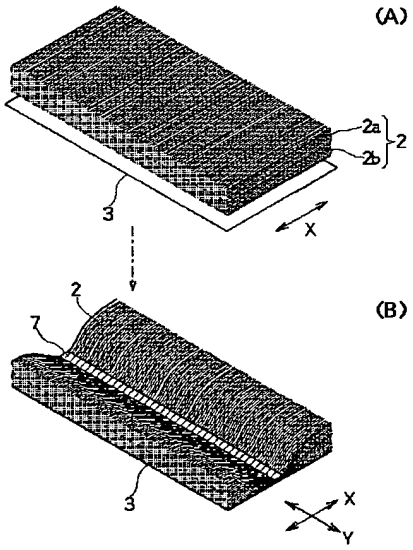
【図２】

図２



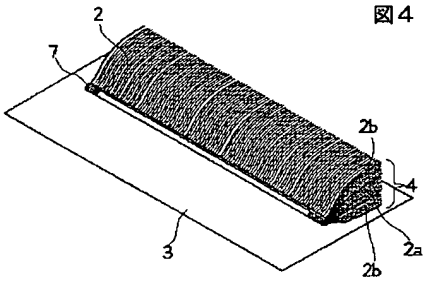
【図３】

図３



【図４】

図４



[JP,11-276402,A]

CLAIMS

[Claim(s)]
[Claim 1]A mop for cleaning, wherein a strip-of-paper-like film in which textiles in which much thermal melting arrival is possible or thermal melting arrival is possible crowds, a brush is formed and thermal melting arrival of said textiles or the strip-of-paper-like film is carried out to a substrate sheet.
[Claim 2]The mop for cleaning according to claim 1 with which said textiles or a strip-of-paper-like film is summarized in layers, a layer of said textiles or a strip-of-paper-like film is folded in two, and thermal melting arrival of the portion of the fold is carried out to said substrate sheet.
[Claim 3]The mop for cleaning according to claim 1 or 2 with which it applies to a inner layer from an outer layer of a brush, and thickness of a film of textiles or the shape of a strip of paper differs.
[Claim 4]The mop for cleaning according to claim 3 whose textiles or strip-of-paper-like film of an outer layer of said brush is thinner than textiles or a strip-of-paper-like film of a inner layer.
[Claim 5]The mop for cleaning according to claim 1 or 2 with which it applies to a inner layer from an outer layer of a brush, and the rigidity of a film of textiles or the shape of a strip of paper differs.
[Claim 6]Textiles or a strip-of-paper-like film of an outer layer of said brush is the mop for cleaning according to claim 5 whose rigidity is lower than textiles or a strip-of-paper-like film of a inner layer.

[Claim 7]The mop for cleaning according to claim 1, 2, 3, 4, 5, or 6 which a substrate sheet is formed in saccate and made removable to an electrode holder.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to the mop for cleaning used in order to pay dust. It is related with the mop for cleaning suitable for throwing away which can be manufactured especially simply cheaply.

[0002]

[Description of the Prior Art]Conventionally, various things are used as an article used at the time of cleaning. That by which several mop many piles which generally twisted thread, such as cotton, were sewn on the base fabric made of cloth as a mop for cleaning used in order to pay the dust of the uneven part of the crevice and furniture of furniture and furniture, or furniture indoors is stopped and used for the holding fixture. However, since it is formed with cotton etc., a mop pile has comparatively heavy weight, and when a mop becomes dirty, changing a new thing for a holding fixture takes time and effort very much. It is too expensive for considering it as disposable products.

[0003]On the other hand, the disposable products using a nonwoven fabric used being attached to cleaning instruments, such as a mop for cleaning, have simple use, and have appeared on the market in the commercial scene widely. The surface of the nonwoven fabric of these cleaning instruments is a wiping surface, and the wiping surface is a flat surface. For example, a nonwoven fabric is pasted together to JP,9-154791,A and the cleaning cloth with which the space for inserting an electrode holder inside is provided is indicated. If this cleaning cloth becomes dirty, it can change a new thing for an electrode holder easily. However, since the shape of a wiping surface is fixed in the form of the electrode holder inserted in cleaning cloth, it is difficult to clean a place with an uneven part or a bend.

[0004]The purpose of this invention is to provide the mop for cleaning which can be manufactured that it is simple and cheaply as an article for cleaning which can wipe away an uneven part and a bend.

[0005]

[Means for Solving the Problem]A strip-of-paper-like film in which textiles in which much thermal melting arrival is possible or thermal melting arrival is possible crowds, a brush is formed, and said purpose and an advantage of this invention are attained by mop for cleaning, wherein thermal melting arrival of said textiles or the strip-of-paper-like film is carried out to a substrate sheet.

[0006]Since a brush is formed in a mop for cleaning of this invention, even if the clamp face is attached to a flat electrode holder etc., an uneven part and a bend can be wiped away with a brush. Since it is formed by joining to a substrate sheet by thermal melting arrival using a strip-of-paper-like film in which textiles in which thermal melting arrival is possible or thermal melting arrival is possible, this brush can be manufactured that it is simple and cheaply.

[0007]When said textiles or a strip-of-paper-like film is summarized in layers, a layer of said textiles or a strip-of-paper-like film is folded in two, a portion of the fold carries out thermal melting arrival to said substrate sheet and a brush is formed, manufacture of a mop for cleaning is simple and preferred.

[0008]As for a brush of an article for cleaning of this invention, it is preferred to have composition which is missing from a inner layer from an outer layer, and differs in thickness of a film of textiles or the shape of a strip of paper. Garbage of a kind which is different by the difference in thickness of a film of textiles or the shape of a strip of paper can be taken. In this case, it is still more preferred that textiles or a strip-of-paper-like film of an outer layer of said brush is thinner than textiles or a strip-of-paper-like film of a inner layer.

[0009]It is also preferred to have composition which is missing from a inner layer from an outer layer of a brush, and differs in the rigidity of a film of textiles or the shape of a strip of paper instead of being textiles or a strip-of-paper-like film from which thickness differs. Garbage of a kind which is different by the difference of the rigidity of a film of textiles or the shape of a strip of paper can be taken. In this case, it is still more preferred that textiles or strip-of-paper-like film of rigidity of an outer layer of said brush is lower than textiles or a strip-of-paper-like film of a inner layer.

[0010]As for a mop for cleaning of this invention, in order to make simple attachment and detachment from an electrode holder, it is preferred that a substrate sheet is formed in saccate.

[0011]

[Embodiment of the Invention]Hereafter, this invention is explained with reference to drawings. The sectional view, drawing 3, and drawing 4 of the mop

for cleaning of drawing 1 of a perspective view when drawing 1 equips an electrode holder with the mop for cleaning of this invention, and drawing 2 (A) are an explanatory view of the manufacturing method of the brush. Textiles or the strip-of-paper-like film 2 is welded to the substrate sheet 3, and, as for the mop 1 for cleaning of drawing 1, the brush 4 is formed. This brush 4 is formed by joining many textiles or strip-of-paper-like films 2 to the substrate sheet 3 in the joined part 7, as shown in drawing 2 (A). When the mop 1 for cleaning of this invention is used for cleaning, an uneven part and a bend can be wiped away using this brush 4.

[0012]As a manufacturing method of this brush 4, as shown in drawing 3 (A), many textiles or strip-of-paper-like films 2 are first piled up in layers on the substrate sheet 3. Textiles or each textiles of the strip-of-paper-like film 2 are prolonged in the direction of X. And as shown in drawing 3 (B), it is joined to the substrate sheet 3 by thermal melting arrival toward the direction of Y which intersects perpendicularly with the direction of X by the center section in the direction of X of textiles or the strip-of-paper-like film 2. Or as shown in drawing 4, after folding in two what piled up many textiles or strip-of-paper-like films 2 in layers, joining by thermal melting arrival and forming the brush 4, the portion of the joined part 7 of the brush 4 can also be joined to the substrate sheet 3 by thermal melting arrival. Or the layer of textiles or the strip-of-paper-like film 2 may be folded in two, and the joined part 7 may be formed by carrying out direct thermal melting arrival of the portion of the fold to the substrate sheet 3. If it is made above, the brush 4 can be easily formed in the substrate sheet 3. The mop 1 for cleaning of this invention formed as mentioned above becomes that to which the length of the brush 4 was mostly equal, as shown in drawing 2 (A).

[0013]However, in order to manufacture the mop 1 for cleaning of this invention simply, the layer of textiles or the strip-of-paper-like film 2 is folded in two, and the brush should just be formed by carrying out thermal melting arrival of the portion of the fold to the substrate sheet 3. For example, as shown in drawing 2 (B), it may be joined to the substrate sheet 3 in the portion which is not a center section in the direction of X of textiles or the strip-of-paper-like film 2. In addition, when much brushes are formed in the mop for cleaning, the position of the portion of a fold may change with each brushes.

[0014]The mop 1 for cleaning of this invention is a simple substance, or two or more portions with the brush of the single tier shown in drawing 3 (B) and drawing 4 can be doubled, and it can form them. For example, the mop 1 for

cleaning shown in drawing 1 and drawing 2 (A) can set the two substrate sheets 3 with the brush of the single tier, and can join and form substrate sheet 3 by thermal melting arrival mutually by the joined parts 3a and 3b. A bag can be formed with the two substrate sheets 3. The mop for cleaning of this invention can adjust the number and quantity of the brush according to the place to be used.

[0015]As for the brush 4 of the mop for cleaning of this invention, it is preferred to be formed with the textiles or the strip-of-paper-like film 2 of thickness from which the outer layer 4b of the brush 4 and the inner layer 4a are different, as shown in drawing 2 (A). This can be formed by carrying out thermal melting arrival of the layer of the textiles which form the inner layer 4a of the brush on the layer of the textiles which form the outer layer 4b of the brush, or strip-of-paper-like film 2b, or the strip-of-paper-like film 2a in piles, as shown in drawing 3 (A). Or as shown in drawing 4, after piling up the textiles or strip-of-paper-like film 2b which forms the outer layer 4b, and the textiles or the strip-of-paper-like film 2a which forms the inner layer 4a, it can form by using double fold and carrying out thermal melting arrival to the substrate sheet 3 so that the inner layer 4a may serve as the inside. By using it combining the textiles or the strip-of-paper-like film of various thickness, the garbage of a kind with which each textiles or the strip-of-paper-like film 2 is different at the time of cleaning will be removed. Therefore, it can be considered as what has a still higher cleaning effect.

[0016]When forming the brush using the textiles or the strip-of-paper-like film from which thickness differs, it is preferred that the textiles of the outer layer 4b or strip-of-paper-like film 2b is thinner than the textiles or the strip-of-paper-like film 2a of the inner layer 4a. By using the outer layer 4b as thin textiles or a strip-of-paper-like film, the dust and garbage which were scratched by the inner layer 4a are captured by the thin textiles or the strip-of-paper-like film of the outer layer 4b. Therefore, the dust or garbage which were paid do not scatter.

[0017]In the mop for cleaning of this invention, a rigid different thing can also be used instead of using the textiles or the strip-of-paper-like film from which the thickness of textiles is different. A rigid difference is changeable with the raw material etc. which constitute textiles and a strip-of-paper-like film. When using different rigid textiles or strip-of-paper-like film, it is preferred that rigidity is lower than the textiles or the strip-of-paper-like film 2a in which the textiles or strip-of-paper-like film 2b which forms the outer layer 4b forms the inner layer 4a.

After scratching hard garbage and dust with the rigid high textiles or the strip-of-paper-like film 2a of the inner layer 4a, the garbage and the dust which were scratched are captured with the textiles of the outer layer 4b, or strip-of-paper-like film 2b. Therefore, the garbage or the dust which were paid do not scatter.

[0018]As for the length of the textiles which constitute the brush 4, or a strip-of-paper-like film, it is preferred that it is 6 cm or more. In this case, the length of a bristle is set to about 3 cm or more in the brush 4 formed in it as was shown in drawing 3. It is because the effect of being involved will go up the hair of hair, etc. at the time of cleaning if the length of the brush 4 is beyond said maximum. As for the length of the hair of textiles or a strip-of-paper-like film, it is [the length of the hair of 10 cm4 or more, i.e., the brush,] still more preferred to be set to about 5 cm or more. If the length of the hair of the brush 4 is long, the uneven part and bend where a hollow is deep can be cleaned.

[0019]In the mop 1 for cleaning of this invention, as shown in drawing 2 (C), it shall be different in the length of the textiles or strip-of-paper-like film 2b which forms the outer layer 4b, and the textiles or the strip-of-paper-like film 2a which forms the inner layer 4a. The brush of the mop for cleaning of this invention is not restricted to being formed in two layers, but can be used as the brush with three layers or the layer beyond it.

[0020]In the mop 1 for cleaning of this invention, as shown in drawing 1 and drawing 2 (A), the substrate sheet 3 is formed in saccate. As shown, for example in drawing 1, this mop 1 for cleaning can insert the electrode holder 10 in the opening 5 of the bag formed with the substrate sheet 3, and can use it for cleaning work. By making the substrate sheet 3 saccate, the attachment and detachment to the electrode holder 10 can be made easy. The electrode holder 10 equipped with the mop for cleaning of this invention is not restricted to the shape held by a hand as shown in drawing 1. It may be used, equipping the electrode holder for wiping what is called a floor with said bag, or a portion in a bag may be used, holding it by hand. Or even if a substrate sheet is not formed in saccate, it is possible to use it, holding by hand.

[0021]Anythings can be used for the substrate sheet 3 if the cloth having contained the nonwoven fabric, resin film, and synthetic fiber which were formed, for example by the span bond method have the intensity which can be equal to use. For example, if the superintendent officer of the substrate sheet 3 is a 10 - 50 g/m^2 grade, he can get required intensity. However, the substrate sheet 3 has

it, when containing the textiles in which thermal melting arrival is possible joins the brush. [preferred] Thermal melting arrival can also perform the process of forming the substrate sheet 3 in saccate in this case. Thermal melting arrival is possible for textiles or the strip-of-paper-like film 2. For joining textiles or the strip-of-paper-like film 2, and the substrate sheet 3, it can carry out using heat treatment (heat embossing roll processing) or an ultrasonic welding means.

[0022]What is generally called a tow, for example can be used for textiles. Textiles are manufactured, for example from polyethylene, polypropylene, nylon, polyester, rayon, etc. The strip-of-paper-like film can make sheet shaped things, such as a nonwoven fabric and a film, the shape of a strip of paper whose width dimension is very short, and what made the bunch the sheet of the shape of the strip of paper can be used for it. For example, what put the break into the nonwoven fabric at the comparatively narrow interval is made into a bunch. This nonwoven fabric and film can use a publicly known thing conventionally. the shape of a strip-of-paper-like film should be involved garbage etc. -- the moderate thickness which can be caught, and a thing with width are preferred.

[0023]When different rigid textiles or strip-of-paper-like film is used by the outer layer 4b and the inner layer 4a of the brush 4, For example, the split yarn for which the textiles or the strip-of-paper-like film 2a which constitutes the inner layer 4a of the brush used polypropylene and polyethylene, The textiles or strip-of-paper-like film 2b which constitutes the outer layer 4b can be used as the rigid different mop 1 for cleaning by the outer layer 4b and the inner layer 4a, if the tow which used polyester and polyethylene is used. In order to make it easy to adsorb dust etc. for, it is preferred to make the mop 1 for cleaning of this invention contain oils. Oils are synthetic oil, such as straight mineral oil, such as paraffin, and polyolefine, silicone oil, a surface-active agent, etc.

[0024]For example, the mop for cleaning in this invention besides the oils described above can be made to contain substances, such as a deodorizer, a moisturizer, and an antimicrobial agent. The mop 1 for cleaning of this invention can give air and mechanical force to the portion of the brush 4, and can fluff it. When using the mop 1 for cleaning of this invention as a product and taking it out to a commercial scene, the capability for the direction where the blind print hair 4 before use had become fluffy to pay dust etc. at the time of use can be taken out promptly. Even if it uses it for cleaning in the state where the brush 4 is not fluffed, as for the mop 1 for cleaning of this invention, the brush 4 becomes fluffy in the progress to be used. Therefore, it is not necessary to fluff the brush 4

beforehand.

[0025]

[Effect of the Invention]If the mop for cleaning of this invention is used as mentioned above, the dust and garbage of an uneven part or a bend can be wiped away irrespective of the form of the electrode holder with which it equips. Since textiles or the film is thinner than the mop made with the pile of usual cotton depending on the kind of the textiles which form the brush especially, or strip-of-paper-like film, it enters also into a fine crevice and dust and garbage can be paid.

[0026]It becomes a mop for cleaning which can be captured without flying and disarranging the dust and garbage which paid the outer layer of the brush by forming the inner layer of rigid low textiles or strip-of-paper-like film, and the brush with rigid high textiles or strip-of-paper-like film.

[0027]Since the textiles in which thermal melting arrival is possible, or a strip-of-paper-like film is used for the mop for cleaning of this invention, it can be manufactured that it is simple and cheaply by thermal melting arrival.

TECHNICAL FIELD

[Field of the Invention]This invention relates to the mop for cleaning used in order to pay dust. It is related with the mop for cleaning suitable for throwing away which can be manufactured especially simply cheaply.

EFFECT OF THE INVENTION

[Effect of the Invention]If the mop for cleaning of this invention is used as mentioned above, the dust and garbage of an uneven part or a bend can be wiped away irrespective of the form of the electrode holder with which it equips. Since textiles or the film is thinner than the mop made with the pile of usual cotton depending on the kind of the textiles which form the brush especially, or strip-of-paper-like film, it enters also into a fine crevice and dust and garbage can be paid.

[0026]It becomes a mop for cleaning which can be captured without flying and disarranging the dust and garbage which paid the outer layer of the brush by

forming the inner layer of rigid low textiles or strip-of-paper-like film, and the brush with rigid high textiles or strip-of-paper-like film.
[0027]Since the textiles in which thermal melting arrival is possible, or a strip-of-paper-like film is used for the mop for cleaning of this invention, it can be manufactured that it is simple and cheaply by thermal melting arrival.

TECHNICAL PROBLEM

[Description of the Prior Art]Conventionally, various things are used as an article used at the time of cleaning. That by which several mop many piles which generally twisted thread, such as cotton, were sewn on the base fabric made of cloth as a mop for cleaning used in order to pay the dust of the uneven part of the crevice and furniture of furniture and furniture, or furniture indoors is stopped and used for the holding fixture. However, since it is formed with cotton etc., a mop pile has comparatively heavy weight, and when a mop becomes dirty, changing a new thing for a holding fixture takes time and effort very much. It is too expensive for considering it as disposable products.
[0003]On the other hand, the disposable products using a nonwoven fabric used being attached to cleaning instruments, such as a mop for cleaning, have simple use, and have appeared on the market in the commercial scene widely. The surface of the nonwoven fabric of these cleaning instruments is a wiping surface, and the wiping surface is a flat surface. For example, a nonwoven fabric is pasted together to JP,9-154791,A and the cleaning cloth with which the space for inserting an electrode holder inside is provided is indicated. If this cleaning cloth becomes dirty, it can change a new thing for an electrode holder easily. However, since the shape of a wiping surface is fixed in the form of the electrode holder inserted in cleaning cloth, it is difficult to clean a place with an uneven part or a bend.
[0004]The purpose of this invention is to provide the mop for cleaning which can be manufactured that it is simple and cheaply as an article for cleaning which can wipe away an uneven part and a bend.

MEANS

[Means for Solving the Problem]A strip-of-paper-like film in which textiles in which much thermal melting arrival is possible or thermal melting arrival is possible crowds, a brush is formed, and said purpose and an advantage of this invention are attained by mop for cleaning, wherein thermal melting arrival of said textiles or the strip-of-paper-like film is carried out to a substrate sheet.
[0006]Since a brush is formed in a mop for cleaning of this invention, even if the clamp face is attached to a flat electrode holder etc., an uneven part and a bend can be wiped away with a brush. Since it is formed by joining to a substrate sheet by thermal melting arrival using a strip-of-paper-like film in which textiles in which thermal melting arrival is possible or thermal melting arrival is possible, this brush can be manufactured that it is simple and cheaply.
[0007]When said textiles or a strip-of-paper-like film is summarized in layers, a layer of said textiles or a strip-of-paper-like film is folded in two, a portion of the fold carries out thermal melting arrival to said substrate sheet and a brush is formed, manufacture of a mop for cleaning is simple and preferred.
[0008]As for a brush of an article for cleaning of this invention, it is preferred to have composition which is missing from a inner layer from an outer layer, and differs in thickness of a film of textiles or the shape of a strip of paper. Garbage of a kind which is different by the difference in thickness of a film of textiles or the shape of a strip of paper can be taken. In this case, it is still more preferred that textiles or a strip-of-paper-like film of an outer layer of said brush is thinner than textiles or a strip-of-paper-like film of a inner layer.
[0009]It is also preferred to have composition which is missing from a inner layer from an outer layer of a brush, and differs in the rigidity of a film of textiles or the shape of a strip of paper instead of being textiles or a strip-of-paper-like film from which thickness differs. Garbage of a kind which is different by the difference of the rigidity of a film of textiles or the shape of a strip of paper can be taken. In this case, it is still more preferred that textiles or strip-of-paper-like film of rigidity of an outer layer of said brush is lower than textiles or a strip-of-paper-like film of a inner layer.
[0010]As for a mop for cleaning of this invention, in order to make simple attachment and detachment from an electrode holder, it is preferred that a substrate sheet is formed in saccate.
[0011]
[Embodiment of the Invention]Hereafter, this invention is explained with reference to drawings. The sectional view, drawing 3, and drawing 4 of the mop

for cleaning of drawing 1 of a perspective view when drawing 1 equips an electrode holder with the mop for cleaning of this invention, and drawing 2 (A) are an explanatory view of the manufacturing method of the brush. Textiles or the strip-of-paper-like film 2 is welded to the substrate sheet 3, and, as for the mop 1 for cleaning of drawing 1, the brush 4 is formed. This brush 4 is formed by joining many textiles or strip-of-paper-like films 2 to the substrate sheet 3 in the joined part 7, as shown in drawing 2 (A). When the mop 1 for cleaning of this invention is used for cleaning, an uneven part and a bend can be wiped away using this brush 4.

[0012]As a manufacturing method of this brush 4, as shown in drawing 3 (A), many textiles or strip-of-paper-like films 2 are first piled up in layers on the substrate sheet 3. Textiles or each textiles of the strip-of-paper-like film 2 are prolonged in the direction of X. And as shown in drawing 3 (B), it is joined to the substrate sheet 3 by thermal melting arrival toward the direction of Y which intersects perpendicularly with the direction of X by the center section in the direction of X of textiles or the strip-of-paper-like film 2. Or as shown in drawing 4, after folding in two what piled up many textiles or strip-of-paper-like films 2 in layers, joining by thermal melting arrival and forming the brush 4, the portion of the joined part 7 of the brush 4 can also be joined to the substrate sheet 3 by thermal melting arrival. Or the layer of textiles or the strip-of-paper-like film 2 may be folded in two, and the joined part 7 may be formed by carrying out direct thermal melting arrival of the portion of the fold to the substrate sheet 3. If it is made above, the brush 4 can be easily formed in the substrate sheet 3. The mop 1 for cleaning of this invention formed as mentioned above becomes that to which the length of the brush 4 was mostly equal, as shown in drawing 2 (A).

[0013]However, in order to manufacture the mop 1 for cleaning of this invention simply, the layer of textiles or the strip-of-paper-like film 2 is folded in two, and the brush should just be formed by carrying out thermal melting arrival of the portion of the fold to the substrate sheet 3. For example, as shown in drawing 2 (B), it may be joined to the substrate sheet 3 in the portion which is not a center section in the direction of X of textiles or the strip-of-paper-like film 2. In addition, when much brushes are formed in the mop for cleaning, the position of the portion of a fold may change with each brushes.

[0014]The mop 1 for cleaning of this invention is a simple substance, or two or more portions with the brush of the single tier shown in drawing 3 (B) and drawing 4 can be doubled, and it can form them. For example, the mop 1 for

cleaning shown in drawing 1 and drawing 2 (A) can set the two substrate sheets 3 with the brush of the single tier, and can join and form substrate sheet 3 by thermal melting arrival mutually by the joined parts 3a and 3b. A bag can be formed with the two substrate sheets 3. The mop for cleaning of this invention can adjust the number and quantity of the brush according to the place to be used.

[0015]As for the brush 4 of the mop for cleaning of this invention, it is preferred to be formed with the textiles or the strip-of-paper-like film 2 of thickness from which the outer layer 4b of the brush 4 and the inner layer 4a are different, as shown in drawing 2 (A). This can be formed by carrying out thermal melting arrival of the layer of the textiles which form the inner layer 4a of the brush on the layer of the textiles which form the outer layer 4b of the brush, or strip-of-paper-like film 2b, or the strip-of-paper-like film 2a in piles, as shown in drawing 3 (A). Or as shown in drawing 4, after piling up the textiles or strip-of-paper-like film 2b which forms the outer layer 4b, and the textiles or the strip-of-paper-like film 2a which forms the inner layer 4a, it can form by using double fold and carrying out thermal melting arrival to the substrate sheet 3 so that the inner layer 4a may serve as the inside. By using it combining the textiles or the strip-of-paper-like film of various thickness, the garbage of a kind with which each textiles or the strip-of-paper-like film 2 is different at the time of cleaning will be removed. Therefore, it can be considered as what has a still higher cleaning effect.

[0016]When forming the brush using the textiles or the strip-of-paper-like film from which thickness differs, it is preferred that the textiles of the outer layer 4b or strip-of-paper-like film 2b is thinner than the textiles or the strip-of-paper-like film 2a of the inner layer 4a. By using the outer layer 4b as thin textiles or a strip-of-paper-like film, the dust and garbage which were scratched by the inner layer 4a are captured by the thin textiles or the strip-of-paper-like film of the outer layer 4b. Therefore, the dust or garbage which were paid do not scatter.

[0017]In the mop for cleaning of this invention, a rigid different thing can also be used instead of using the textiles or the strip-of-paper-like film from which the thickness of textiles is different. A rigid difference is changeable with the raw material etc. which constitute textiles and a strip-of-paper-like film. When using different rigid textiles or strip-of-paper-like film, it is preferred that rigidity is lower than the textiles or the strip-of-paper-like film 2a in which the textiles or strip-of-paper-like film 2b which forms the outer layer 4b forms the inner layer 4a.

After scratching hard garbage and dust with the rigid high textiles or the strip-of-paper-like film 2a of the inner layer 4a, the garbage and the dust which were scratched are captured with the textiles of the outer layer 4b, or strip-of-paper-like film 2b. Therefore, the garbage or the dust which were paid do not scatter.

[0018]As for the length of the textiles which constitute the brush 4, or a strip-of-paper-like film, it is preferred that it is 6 cm or more. In this case, the length of a bristle is set to about 3 cm or more in the brush 4 formed in it as was shown in drawing 3. It is because the effect of being involved will go up the hair of hair, etc. at the time of cleaning if the length of the brush 4 is beyond said maximum. As for the length of the hair of textiles or a strip-of-paper-like film, it is [the length of the hair of 10 cm4 or more, i.e., the brush,] still more preferred to be set to about 5 cm or more. If the length of the hair of the brush 4 is long, the uneven part and bend where a hollow is deep can be cleaned.

[0019]In the mop 1 for cleaning of this invention, as shown in drawing 2 (C), it shall be different in the length of the textiles or strip-of-paper-like film 2b which forms the outer layer 4b, and the textiles or the strip-of-paper-like film 2a which forms the inner layer 4a. The brush of the mop for cleaning of this invention is not restricted to being formed in two layers, but can be used as the brush with three layers or the layer beyond it.

[0020]In the mop 1 for cleaning of this invention, as shown in drawing 1 and drawing 2 (A), the substrate sheet 3 is formed in saccate.As shown, for example in drawing 1, this mop 1 for cleaning can insert the electrode holder 10 in the opening 5 of the bag formed with the substrate sheet 3, and can use it for cleaning work. By making the substrate sheet 3 saccate, the attachment and detachment to the electrode holder 10 can be made easy. The electrode holder 10 equipped with the mop for cleaning of this invention is not restricted to the shape held by a hand as shown in drawing 1. It may be used, equipping the electrode holder for wiping what is called a floor with said bag, or a portion in a bag may be used, holding it by hand. Or even if a substrate sheet is not formed in saccate, it is possible to use it, holding by hand.

[0021]Anythings can be used for the substrate sheet 3 if the cloth having contained the nonwoven fabric, resin film, and synthetic fiber which were formed, for example by the span bond method have the intensity which can be equal to use. For example, if the superintendent officer of the substrate sheet 3 is a 10 - 50 g/m^2 grade, he can get required intensity. However, the substrate sheet 3 has

it, when containing the textiles in which thermal melting arrival is possible joins the brush. [preferred] Thermal melting arrival can also perform the process of forming the substrate sheet 3 in saccate in this case. Thermal melting arrival is possible for textiles or the strip-of-paper-like film 2. For joining textiles or the strip-of-paper-like film 2, and the substrate sheet 3, it can carry out using heat treatment (heat embossing roll processing) or an ultrasonic welding means.
[0022]What is generally called a tow, for example can be used for textiles. Textiles are manufactured, for example from polyethylene, polypropylene, nylon, polyester, rayon, etc. The strip-of-paper-like film can make sheet shaped things, such as a nonwoven fabric and a film, the shape of a strip of paper whose width dimension is very short, and what made the bunch the sheet of the shape of the strip of paper can be used for it. For example, what put the break into the nonwoven fabric at the comparatively narrow interval is made into a bunch. This nonwoven fabric and film can use a publicly known thing conventionally. the shape of a strip-of-paper-like film should be involved garbage etc. -- the moderate thickness which can be caught, and a thing with width are preferred.
[0023]When different rigid textiles or strip-of-paper-like film is used by the outer layer 4b and the inner layer 4a of the brush 4, For example, the split yarn for which the textiles or the strip-of-paper-like film 2a which constitutes the inner layer 4a of the brush used polypropylene and polyethylene, The textiles or strip-of-paper-like film 2b which constitutes the outer layer 4b can be used as the rigid different mop 1 for cleaning by the outer layer 4b and the inner layer 4a, if the tow which used polyester and polyethylene is used. In order to make it easy to adsorb dust etc. for, it is preferred to make the mop 1 for cleaning of this invention contain oils. Oils are synthetic oil, such as straight mineral oil, such as paraffin, and polyolefine, silicone oil, a surface-active agent, etc.
[0024]For example, the mop for cleaning in this invention besides the oils described above can be made to contain substances, such as a deodorizer, a moisturizer, and an antimicrobial agent. The mop 1 for cleaning of this invention can give air and mechanical force to the portion of the brush 4, and can fluff it. When using the mop 1 for cleaning of this invention as a product and taking it out to a commercial scene, the capability for the direction where the blind print hair 4 before use had become fluffy to pay dust etc. at the time of use can be taken out promptly. Even if it uses it for cleaning in the state where the brush 4 is not fluffed, as for the mop 1 for cleaning of this invention, the brush 4 becomes fluffy

in the progress to be used. Therefore, it is not necessary to fluff the brush 4 beforehand.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]A perspective view when an electrode holder is equipped with the mop for cleaning of this invention

[Drawing 2]As for (A), the sectional view of the mop for cleaning of drawing 1, (B), and (C) are the sectional views of other examples of the mop for cleaning of this invention.

[Drawing 3]The explanatory view of the manufacturing method of the brush of the mop for cleaning of this invention

[Drawing 4]The explanatory view of other manufacturing methods of the brush of the mop for cleaning of this invention

[Description of Notations]

1 The mop for cleaning

2 Textiles or a strip-of-paper-like film

3 Substrate sheet

4 Brush

4a The inner layer of the brush

4b The outer layer of the brush

5 Opening

7 Joined part

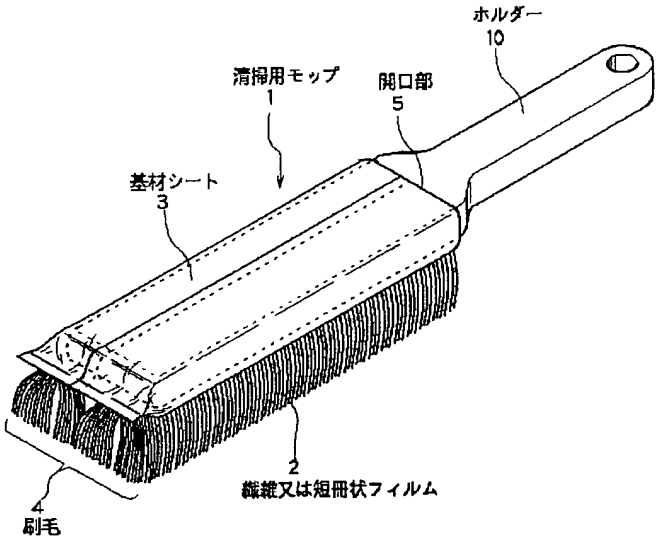
10 Electrode holder

The direction to which X textiles or a strip-of-paper-like film extends

DRAWINGS

[Drawing 1]

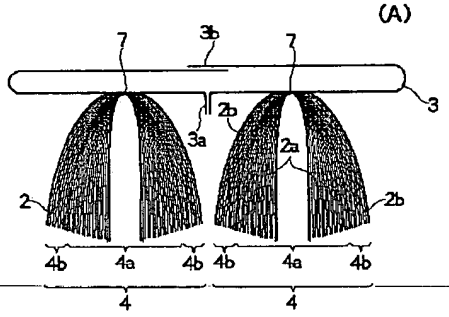
図1



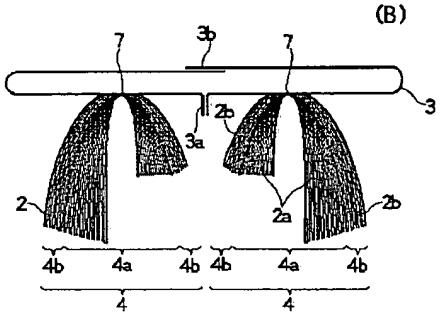
[Drawing 2]

図2

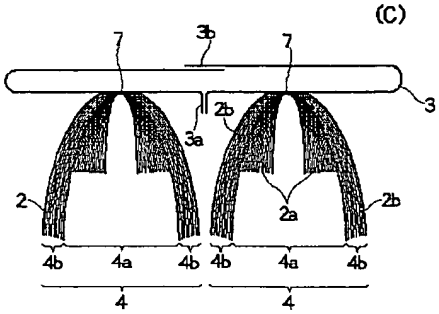
(A)



(B)

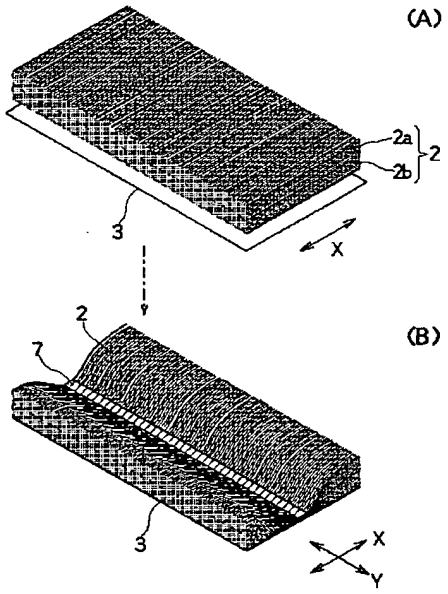


(C)



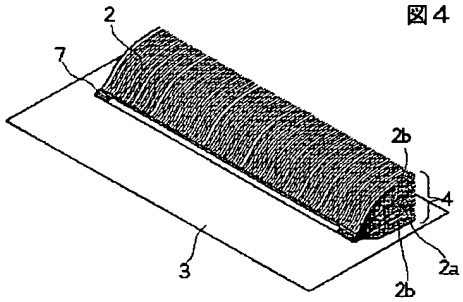
[Drawing 3]

図３



[Drawing 4]

図４



[Translation done.]